



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

File
ACT/027/007

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dr. G. A. (Jim) Shirazi, Division Director

* M E M O R A N D U M *

TO: Jim Smith
FROM: David W. Darby
SUBJECT: Information concerning the
status of Western States Minerals,
Drum Mine Project ACT/027/007
DATE: November 14, 1983

Approved by Board
11-17-83
form & amt. surety
JWS

1. The Mine Plan has been reviewed by the technical staff and determined complete.
2. A surety bond has been submitted by Western States Minerals in the amount of \$117,000, a little over the estimated reclamation cost for the life of the mine.
3. An Order to Show Cause was sent to the Millard County Chronicle; a local newspaper and the Salt Lake Tribune and Deseret News; both Salt Lake City newspapers on October 3, 1983. The comment period started October 7, 1983 and ended November 5, 1983. No adverse or aggrieved comments have been received.
4. The Executive Summary has been completed and distributed to the Board Members.
5. It should be recommended to the Board of Oil, Gas & Mining that the surety bond be accepted and mining be allowed.

DAVID DARBY

DD/jvb

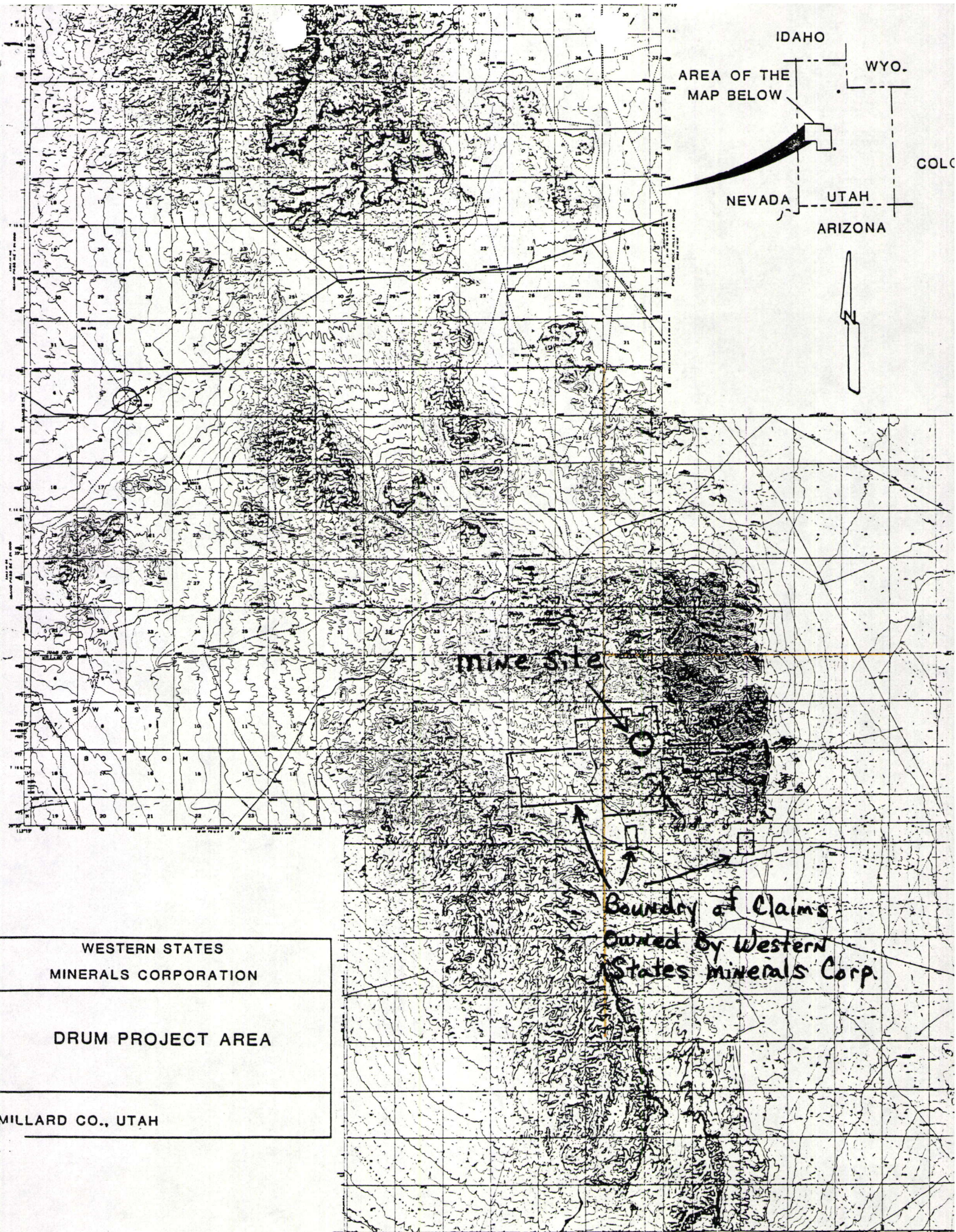
BOND ESTIMATE

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
4241 State Office Building
Salt Lake City, Utah 84114

OPERATION	ACRES	COST/ACRE	CUBIC YARDS	COST/CY	TOTAL
A. Removal of structures and equipment					
1. Electrical equipment - mobile generator - 2 poles					700
2. Major mobile equipment - generator		- \$500			
3. Major stationary equipment - 2 poles		- \$200			
4. Service mill and office - One temporary office building and shop. 60 hrs. @ \$50.00/hr. = 3000					5,000
Strip plant and lab - 40 hrs @ \$50.00/hr. = 2000					
2. Removal of trash and - Final cleanup - \$250 (trash buried daily in dump) extraneous debris contaminants (oil, etc.) hauled out periodically as needed.					250
3. Regrading and recountouring of waste rock and waste disposal sites, tailings and sediment ponds. Diversions and areas of critical grade.					
1. Earthwork to final grade - heap leach pads - 7 days = \$6,250 (D-9 Cat)					9,930
mine and waste dump - 3 days = \$2,680					
					\$9,930 (final)

OPERATION	ACRES	COST/ACRE	CUBIC YARDS	COST/CY	TOTAL
2. Topsoil replacement					
a. Procurement (if necessary)					
b. Respreading	29 ac.ft..		46,786	\$1.00	\$46,786
3. Stabilization					
a. Reseeding	45 acres	\$400-			\$18,000
b. Fertilization					
c. Mulching	45 acres	\$50			2,250
d. Irrigation					
D. Safety					
1. Erection of portal coverings and fences		Fencing modification and installation 3500 feet @ \$2.40/foot			8,400
2. Plugging of boreholes and exploratory openings	---				
3. Removal of hazardous materials	---				
4. Elimination of highwalls.		Fencing-8 foot high x 800' @ \$15.63/Ft.			12,500

OPERATION	ACRES	COST/ACRE	CUBIC YARDS	COST/CY	TOTAL
Foundation elimination and transportation corridor reclamation	---				
1. Burial and/or break-up	---				
2. Removal	---				
Monitoring					
1. Continuing or periodic monitoring sampling and testing deemed necessary	3 times @ \$780				2,340
Site specific variations from aesthetic costs				Subtotal	106,156
Contingency and contractual costs					+10%
Inflation factor					
TOTAL					116,771



MR FORM 5

(Revised August 1983)
(Non-Federal)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
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Salt Lake City, Utah 84114

THE MINED LANDS RECLAMATION ACT

BOND

The undersigned WESTERN STATES MINERALS CORPORATION
as principal, and THE AMERICAN INSURANCE COMPANY as
surety, hereby jointly and severally bind ourselves, our heirs, administrators,
executors, successors and assigns unto the State of Utah, Division of Oil, Gas
and Mining in the penal sum of One Hundred Seventeen Thousand, and no/100
----- dollars (\$117,000.00).

The principal estimated in a "Notice of Intention to Commence Mining
Operations and a Mining and Reclamation Plan," filed with the Division of Oil,
Gas and Mining on the 30th day of September,
19 83, that 88 acres of land will be affected by this mining
operation in the State of Utah. A description of the affected land is attached
hereto as Exhibit "A."

When the Division has determined that the principal has satisfactorily
reclaimed the above-mentioned lands affected by mining in accordance with the
approved Mining and Reclamation Plan and has faithfully performed all
requirements of the Mined Land Reclamation Act, and complied with the Rules
and Regulations adopted in accordance therewith, then this obligation shall be
void; otherwise it shall remain in full force and effect until the reclamation
is completed as outlined in the approved Mining and Reclamation Plan.

If the approved plan provides for reclamation of the land affected on a
piecemeal or cyclic basis, and the land is reclaimed in accordance with such
plan, then this bond may be reduced periodically.

In the converse, if the plan provides for a gradual increase in the area
of the land affected or increased reclamation work, then this bond may
accordingly be increased with the written approval of the surety company.

The Division shall only accept the bond of a surety company if the bond is
noncancellable by the surety at any time for any reason including, but not
limited to nonpayment of premium or bankruptcy of the permittee during the
period of liability.

NOTE: Where one signs by virtue of Power of Attorney for a surety company, such Power of Attorney must be filed with this bond. If the principal is a corporation, the bond shall be executed by its duly authorized officers with the seal of the corporation affixed.

WESTERN STATES MINERALS CORPORATION
Principal (Company)

By Robert A. Hurd
Company Official - Position
Robert A. Hurd, Asst. Secy-Treas.

Date: 9/30/83

THE AMERICAN INSURANCE COMPANY
Surety (Company)

By Betty J. Biskey
Official of Surety - Position
Betty J. Biskey, Attorney-in-Fact

DATE: 9/30/83

BOARD:

DATE: _____

State of Minnesota,
County of Hennepin } ss:

On September 30, 1983
therein, duly commissioned and sworn, personally appeared
Betty J. Biskey

, before me, a Notary Public in and for said County and State, residing

known to me to be Attorney-in-Fact of The American Insurance Company
the corporation described in and that executed the within and foregoing instrument, and known to me to be the person who executed
the said instrument in behalf of the said corporation, and he duly acknowledged to me that such corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year stated in this certificate above.



Julie Santman
Notary Public

GENERAL
POWER OF
ATTORNEY

THE AMERICAN INSURANCE COMPANY

KNOW ALL MEN BY THESE PRESENTS: That THE AMERICAN INSURANCE COMPANY, a Corporation duly organized and existing under the laws of the State of New Jersey, and having its principal office in the City and County of San Francisco, California, has made, constituted and appointed, and does by these presents make, constitute and appoint

J. D. CHANDLER, M. L. LIVELY, JOHN H. GLIEDEN, JOHN A. ALKIRE,
BETTY J. BISKEY and GORDON C. MOORE

jointly or severally
its true and lawful Attorney(s)-in-Fact, with full power and authority hereby conferred in its name, place and stead, to execute, seal, acknowledge and deliver any and all bonds, undertakings, recognizances or other written obligations in the nature thereof

and to bind the Corporation thereby as fully and to the same extent as if such bonds were signed by the President, sealed with the corporate seal of the Corporation and duly attested by its Secretary, hereby ratifying and confirming all that the said Attorney(s)-in-Fact may do in the premises.

This power of attorney is granted pursuant to Article VIII, Section 30 and 31 of By-laws of THE AMERICAN INSURANCE COMPANY now in full force and effect.

"Article VIII, Appointment and Authority Assistant secretaries, and Attorney-in-Fact and Agents to accept Legal Process and Make Appearances.

Section 30, Appointment. The Chairman of the Board of Directors, the President, any Vice-President or any other person authorized by the Board of Directors, the Chairman of the Board of Directors, the President or any Vice-President, may, from time to time, appoint Resident Assistant Secretaries and Attorneys-in-Fact to represent and act for and on behalf of the Corporation and Agents to accept legal process and make appearances for and on behalf of the Corporation.

Section 31, Authority. The Authority of such Resident Assistant Secretaries, Attorneys-in-Fact, and Agents shall be as prescribed in the instrument evidencing their appointment, and any such appointment and all authority granted thereby may be revoked at any time by the Board of Directors or by any person empowered to make such appointment."

This power of attorney is signed and sealed under and by the authority of the following Resolution adopted by the Board of Directors of THE AMERICAN INSURANCE COMPANY at a meeting duly called and held on the 28th day of September, 1966, and said Resolution has not been amended or repealed:

"RESOLVED, that the signature of any Vice-President, Assistant Secretary, and Resident Assistant Secretary of this Corporation, and the seal of this Corporation may be affixed or printed on any power of attorney, on any revocation of any power of attorney, or on any certificate relating thereto, by facsimile, and any power of attorney, any revocation of any power of attorney, or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Corporation."

IN WITNESS WHEREOF, THE AMERICAN INSURANCE COMPANY has caused these presents to be signed by its Vice-President,

and its corporate seal to be hereunto affixed this 29th day of November 19 82 .



STATE OF CALIFORNIA,

CITY AND COUNTY OF SAN FRANCISCO

ss.

THE AMERICAN INSURANCE COMPANY

By

Vice-President

On this 29th day of November, 19 82, before me personally came Richard Williams to me known, who, being by me duly sworn, did depose and say: that he is Vice-President of THE AMERICAN INSURANCE COMPANY, the Corporation described in and which executed the above instrument; that he knows the seal of said Corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said Corporation and that he signed his name thereto by like order.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year herein first above written.



Susie K. Gilbert

Notary Public

CERTIFICATE

STATE OF CALIFORNIA,

CITY AND COUNTY OF SAN FRANCISCO

ss.

I, the undersigned, Resident Assistant Secretary of THE AMERICAN INSURANCE COMPANY, a NEW JERSEY Corporation, DO HEREBY CERTIFY that the foregoing and attached POWER OF ATTORNEY remains in full force and has not been revoked; and furthermore that Article VIII, Sections 30 and 31 of the By-laws of the Corporation, and the Resolution of the Board of Directors, set forth in the Power of Attorney, are now in force.

Signed and sealed at the City and County of San Francisco. Dated the 30th day of September, 1983 .



Loretta E. Prater

Resident Assistant Secretary

EXECUTIVE SUMMARY

Mine Name: <u>Drum Mine</u>	I.D. No. <u>ACT/027/007</u>
Operator: <u>Western States Minerals Corp.</u>	County: <u>Millard</u>
<u>4975 Van Gordon Street</u>	New/Existing: <u>New</u>
<u>Wheat Ridge, CO 80033</u>	Mineral Ownership: <u>Western States</u>
Telephone: <u>(303) 425-7042</u>	Surface Ownership: <u>Federal (BLM)</u>
Contact Person: <u>Bob Roggenthen</u>	Lease No.(s): <u>None</u>
Life of Mine: <u>26 months</u>	Permit Term: <u>26 months</u>
Legal Description: <u>Section 7, Township 15 South, Range 10 West</u>	
Mineral(s) to be Mined: <u>Gold</u>	
Mining Methods: <u>Strip</u>	
Acres to be Disturbed: <u>88 total</u>	
Present Land Use: <u>Mining, rangeland</u>	
Postmining Land Use: <u>Rangeland</u>	
Variances from Reclamation Standards (Rule M-10) Granted: <u>Highwall may be left at a 47% slope depending on stability analysis at cessation of mining.</u>	

Soils and Geology:

Soil Description: Shallow rocky surface horizon weathered from limestone under arid conditions.

pH: 7.5-8 surface horizon

Special Handling Problems: None

Geology Description: Basin and range structural features. Mine is located in limestone matrix on edge of quartz latite intrusion.

Hydrology:

Ground Water Description: None encountered, none to be affected.

Surface Water Description: Ephemeral stream channels characteristic of the area, diversion, culverts and berms used to direct runoff and provide against water diminution.

Water Monitoring Plan: None; no water will be discharged.

Ecology:

Vegetation Type(s); Dominant Species: Rabbitbrush, black sagebrush, shadscale, Mormon tea, viscid rabbitbrush, juniper and various grasses.

Percent Surrounding Vegetative Cover: Perennial shrubs and grasses--24% cover; annuals--10-28% cover; perennial grass--2.4-3.3% cover; junipers--3.5 trees/acre.

Wildlife Concerns: None

Surface Facilities: None, permanent

Mining and Reclamation Plan Summary: See attachment.

Surety:

Amount: \$116,771.00 (see attached estimate)

Form: Insurance Bond

Renewable Term: Life of Mine (26 months)

DURING OPERATIONS:

1. A total of some eighty-eight (88) acres will be disturbed. Prior to mining, soil material will be removed and stockpiled, stabilized and seeded for reclamation purposes upon termination of operations.
2. Contemporaneous reclamation/test plots will be conducted using a BLM/DOGM approved seed mix. Areas to be reclaimed will be fertilized as per the results of soil testing. The seedbed will be disked prior to drill seeding. A transect will be conducted annually to monitor success of reclamation treatments. Additional treatments will be utilized, should this prove necessary.
3. Signs, berms and fencing will be provided to minimize safety hazard to the public, domestic animals and wildlife.
4. Surface diversions will be emplaced to prevent disturbed runoff from leaving the mining site, whereas undisturbed runoff will be directed around the facilities into natural drainage channels.
5. Potable water will be pumped to the mine site from a well drilled on public lands. The necessary water rights have been appropriated via a lease agreement on file in the office of the County Recorder of Millard County, Utah.
6. The processing facility will operate on the property utilizing a cyanide leach process. Fencing, liners, berms and diversions will be utilized to protect against environmental degradation.
7. The operator will provide a surety bond to cover the estimated reclamation costs to be held by the Utah Division of Oil, Gas and Mining.

AFTER OPERATIONS:

1. All buildings, structures and extraneous debris will be removed from the site.
2. Final grading will be done to conform to the existing terrain. Slopes will be contour terraced. In cases where this is not safe or practical, the Division may approve highwalls to be left. Any remnant highwalls will blend in with the existing terrain. Roads will be scarified, fertilized, drill seeded and imprinted to allow for revegetation. If a highwall is left, a security fence will be installed on top of the slope to ensure protection to the public, domestic animals and wildlife.
3. All disturbed areas left upon the cessation of mining activities will be topsoiled and revegetated utilizing methods proven successful in contemporaneous reclamation/test plots. Fences other than used for highwalls will remain in place during monitoring until bond retrieval is achieved to preclude adverse grazing impacts.
4. Runoff water diversions will be removed.
5. The site will be monitored to assure that adequate revegetation ensues to allow the approved post mining land use.